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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,669	02/19/2004	Anis Muhammad	60,680-780	5252

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EXAMINER

HEWITT, JAMES M

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/782,669	Applicant(s) MUHAMMAD ET AL.	
	Examiner James M. Hewitt	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). The following does not find proper antecedent basis in the specification: the limitation “wherein the joining member includes a resilient sealing flange extending axially therefrom from a second surface that is opposite facing from the first surface” in claim 5.

Claim Objections

Claim 22 is objected to because of the following informalities:

In claim 22, line 4, “a radial joining member” should be “the joining member”.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in

the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Describing the openings as "rectangular" constitutes new matter. The openings are never described or shown to be rectangular.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olson (US 6,447,024) in view of Rea et al (US 5,542,717).

With respect to claim 1, Olson discloses a connector assembly comprising: a male member having an circumferential external shoulder (64) on an outer surface thereof; a female member (14) having a cavity defined by an inner circumferential wall for receiving the male member, the cavity extending from a first end to an interior portion of the female member, the circumferential wall defining an internal shoulder, the tubular female member having a circumferential external shoulder (see Figure 1) on an outer surface thereof; and a retainer member (12) surrounding a portion of the male member, the retainer member including a plurality of circumferentially spaced resilient internal retainer arms (see Figure 3), the internal retainer arms each having a distal end for simultaneously engaging the male member external shoulder and the female

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member internal shoulder when the male member is within the female member (see Figure 2). Olson fails to teach the claimed external flange. Rea et al teaches that it is known to provide a similar pipe coupling comprising an internal cylindrical section connected by a joining member (18c) to an annular external retainer flange (18a), the external flange being radially spaced from the internal section and having a distal end defining a radially inwardly extending protrusion (18h) for engaging the female member external shoulder when the male member is within the female member. Rea et al's protrusion permits secure connection of the coupling to the female member (16). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Olson to include an external flange as taught by Rea et al in order to better retain the retainer member on the female member.

With respect to claim 2, wherein the external flange includes a plurality of axial openings (refer to FIG. 2 and FIG. 5 in Rea et al) dividing the external flange into a plurality of resilient axially extending external retainer fingers (18b) each having a radially inwardly extending lip (18h) for engaging the female member external shoulder.

With respect to claim 3, Rea et al teaches at least two semi-circumferential slot-shaped rectangular openings (as shown in FIG. 2 and FIG. 5 defining fingers 18b) are formed through the external flange near the radial joining member.

With respect to claim 4, wherein the joining member is disc shaped having a central opening through which the male member extends, the joining member having a first surface for engaging the first end of the female member. Refer to Figure 2 in Olson.

With respect to claim 5, wherein the joining member includes a resilient sealing flange extending axially therefrom from a second surface that is opposite facing from the first surface, the sealing flange surrounding the central opening for engaging the male member. Refer to Figure 2 in Olson.

With respect to claim 6, wherein the distal ends of the internal retainer arms are adapted to be compressed between the male member external shoulder and the female member internal shoulder when the male member is within the female member to create an interference fit therebetween. Refer to Figure 2 in Olson.

With respect to claim 7, wherein the distal ends of the internal retainer arms are angled radially outward and each include opposite facing first and second surfaces for engaging the male member external shoulder and the female member internal shoulder, respectively. Refer to Figures 2 and 3 in Olson.

With respect to claim 8, Olson fails to teach that the retainer member is formed as a unitary structure from resilient plastic. Olson employs metal to form his retainer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form Olson's retainer member of plastic, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

With respect to claim 9, wherein the outer surface of the female member is defined by an outer annular wall having a first section and a second section, the first section being located between the first end and the second section and having an outer diameter greater than that of the second section, a transition between the first portion

and the second portion defining the female member external shoulder, wherein the external flange extends axially along the first portion. Refer to Figure 1 in Olson.

With respect to claim 10, wherein the outer annular wall includes a third section that extends from the first end to the first section, the diameter of the third section increasing from the first end to the first section of the first end for expanding the distal end of the external flange radially outward as the retainer member is slid onto the female member. Refer to Figure 1 in Olson.

With respect to claim 11, wherein the internal circumferential wall includes an annular groove (26 in Olson) formed therein and having first and second substantially opposed sides, the first side being closer to the first end than the second side, the first side defining the female member internal shoulder.

With respect to claim 12, wherein the second side of the annular groove defines a further female member internal shoulder (27 in Olson) for engaging the male member external shoulder to prevent insertion of the male member into the female member beyond a predetermined point.

With respect to claim 13, wherein the joining member includes a central opening through which the male member extends, and the male member includes a further circumferential external shoulder (defined by 46 in Olson) on the outer surface thereof in a location that is on an opposite side of the central opening than the female member when the male member is within the female member, the further circumferential external shoulder having a diameter larger than that of the central opening.

With respect to claim 14, wherein the joining member includes a resilient sealing flange (82) about a circumference of the central opening and extending axially towards the further circumferential external shoulder. Refer to Figure 2 in Olson.

With respect to claim 15, wherein the external flange extends a greater axial distance from the joining member than the internal retainer arms.

With respect to claim 16, refer to the above rejection of claim 1.

With respect to claim 17, wherein a diameter of the female member outer annular wall decreases at circumferential shoulder that is spaced apart from and faces a substantially opposite direction than the first end, the outer annular flange of the retainer member including a radially inward projection at an end thereof adapted to engage the circumferential shoulder when the male member is joined to the female member.

With respect to claim 18, wherein the outer flange includes a plurality of semi-circular circumferentially spaced resilient outer retainer arms, the radially inward projection including a lip on each of the outer retainer arms. Refer to Rea et al.

With respect to claim 19, wherein the outer retainer arms are adapted to radially deflect outwards when passing over the female member outer wall. Refer to Rea et al.

With respect to claim 20, refer to the above rejections of Olson in view of Rea et al.

With respect to claim 21, wherein a diameter of the female member outer annular wall decreases at circumferential shoulder that is spaced apart from and faces a

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substantially opposite direction than the first end, the outer retainer means including a radially inward projection (18h in Rea et al) at an end thereof adapted to engage the circumferential shoulder when the male member is joined to the female member.

With respect to claim 22, wherein the interior retainer means includes a plurality of circumferentially spaced resilient internal retainer arms and the outer retainer means includes an annular external retainer flange (18a in Rea et al) radially spaced from the internal retainer arms and connected thereto by the joining member, the internal retainer arms each having a distal end for engaging the male member increased diameter circumferential portion and the side of the female member annular groove when the male member is within the female member.

Response to Arguments

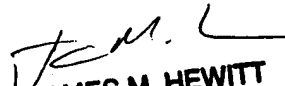
Applicant's arguments, see pages 10-14, filed 2/1/06, with respect to the rejection(s) of claim(s) 1-25 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made (see above).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JAMES M. HEWITT
PRIMARY EXAMINER